

Genetic Disorders in Portraits

Alan E.H. Emery

Green College, Oxford, UK

Many artists have depicted genetic disorders in portrait paintings. In some instances such disorders can be identified in self-portraits, most notably the tetralogy of Fallot in the Dutch painter Dick Ket, or in portraits of the famous, such as the Habsburg jaw in the Emperor Charles V. But it is in other portraits that most examples can be found, such as the different types of dwarfism depicted by Velázquez. A table listing over 70 examples is provided. © 1996 Wiley-Liss, Inc.

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INTRODUCTION

The relationship between paintings and disease is a broad one. It is possible to consider, for instance, changing attitudes in society toward the depiction of disease. Dwarfs, for example, were considered quite differently in Pharaonic Egypt, ancient Greece and Roman civilisations and, much later, by painters such as Velázquez [Dasen, 1988]. Another aspect is the effect on their work of diseases in artists themselves. A most notable example is colour blindness [Trevor-Roper, 1988], in such artists as Charles Meryon (1821–1868), Fernand Léger (1881–1955) and Piet Mondrian (1872–1944). Failing sight leading ultimately to blindness is well-documented in the English painters Malcolm Drummond (1880–1945) and Percy Wyndham Lewis (1882–1957) and the Russian painter Mikhail Vrubel (1856–1910). There are many examples of figure and colour distortion resulting from cataracts, a particularly interesting example being that of Claude Monet (1840–1926). The range of colours in his paintings changed significantly after his cataracts were removed. Madness has also affected style as well as the content of paintings. This has been extensively reviewed by MacGregor [1989]. Also, physical disease can have a significant effect on an artist's work [Emery and Emery, 1994a]. The painful and disabling effects of arthritis are clearly visible in the later works of Pierre Auguste Renoir (1841–1919), and of scleroderma in the case of Paul Klee (1879–1940).

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Address reprint requests to Allan E.H. Emery, Ingleside, Upper West Terrace, Budleigh Salterton, Devon EX9 6NZ, England.

Perhaps the most obvious relationship between art and medicine, however, is the depiction of diseases as well as medical diagnosis and treatment [Emery and Emery, 1992, 1994a]. Here we shall only consider the depiction of genetic disease in portraits.

GENETIC DISORDERS IN SELF PORTRAITS

Several artists have themselves suffered from genetic conditions which have been revealed in their self portraits. Congenital strabismus is inherited as a multifactorial trait. Albrecht Dürer (1471–1528) had a divergent squint which is clearly evident in his self portraits of 1491 (Fig. 1) and 1498. The same defect is also obvious in his portraits of his *Mother* (1514), *Caspar Sturm* (1520) and a *Laughing Peasant Woman* (1505, Fig. 2).

Pyknodysostosis, an autosomal recessive disorder characterised by short stature, bony fractures, and a large anterior fontanelle, is believed to have affected Henri de Toulouse-Lautrec (1864–1901) whose parents were in fact, first cousins. He frequently portrayed his deformities in various caricatures as well as in the painting *Au Moulin Rouge* (1892).

Yet another example, and in many ways the most revealing and instructive, is the Dutch painter, Dick Ket (1902–1940). It seems likely that he suffered from tetralogy of Fallot with dextrocardia; his numerous self portraits over many years clearly show the progressive development of finger clubbing, cyanosis and plethora (Fig. 3). Synophrys is well-illustrated in various self portraits of the artist Frida Kahlo (1907–1954). There are also examples of genetic conditions in a number of other self portraits.

GENETIC DISORDERS IN THE PORTRAITS OF THE FAMOUS

Portraits of the famous occasionally reveal genetic disorders in the sitter, the relevance of which the artist himself may have been unaware. The most renowned is the presence of the Habsburg jaw in the Emperor Charles V depicted in his 1547 portrait by Titian (c 1487–1576). Other examples include Crouzon's disease in Count Guriev (1821) by Ingres, syndactyly in Canon Nicolai Aegidius (1517) by Quentin Massys, female hirsutism in Magdalena Ventura (1631) by Ribera, phocomelia in Charles Emmanuel I (1573) by Argenta, strabismus in Count Tommaso Inghirami (1513–1514) by Raphael and in the Duke of Prussia (1528) by Lucas Cranach. Other examples are given in



Fig. 1. *Self Portrait* (1491) Albrecht Dürer. (Reproduced by kind permission of the Universitätsbibliothek, Erlangen-Nürnberg.)



Fig. 2. *Laughing Peasant Woman* (1505) Albrecht Dürer. (Reproduced by kind permission of the British Museum, London.)



Fig. 3. *Self Portrait* (1939; Dick Ket). (Reproduced by kind permission of the Gemeentemuseum, Arnhem.)

Table I. However, in many portraits of the famous who are now known to have had a genetic disfiguring disorder, this has often been deliberately obscured by the artist, who after all may not have wished to offend his patron!

GENETIC DISORDERS IN OTHER PORTRAITS

Certain well-defined congenital malformations and genetic disorders can frequently be identified in paintings throughout the ages [Emery, 1991; Emery and Emery, 1994b]. The most notable examples are to be found in the paintings of Velázquez (1599–1660) who portrayed various types of dwarfs in the court of King Philip IV of Spain. Another, but much less well-known, source of portraits of individuals with various genetic disorders, most notably those associated with microcephaly (Figs. 4 and 5), is to be found in the patient books of Alexander Morison [Morison, 1840]. He is credited with having given the first course of formal lectures in psychiatry in Britain in 1823. His notes are beautifully illustrated throughout with crayon drawings and water colours of his patients.

Many other examples of genetic disorders in portraits are given in Table I. However, it has to be admitted that in some cases the diagnosis is speculative and

TABLE I. Portraits Which Depict Various Congenital Abnormalities and Genetic Disorders*

Diagnosis	Painting		
	Title (date)	Location	Artist
Albinism	<i>Nude Girl on a Fur</i> (1932)	Scottish National Gallery of Modern Art (Edinburgh)	Otto Dix (1891–1969)
Blindness	<i>The Blind Man of Gombazo</i>	Prado (Madrid)	Jusepe de Ribera (1591–1652)
Cleft lip	<i>or The Sense of Touch</i> (1632)		
Crouzon's disease	<i>Boy with Cleft Lip</i> (1902)	Tretiakov Gallery (Moscow)	Mikhail Vrubel (1856–1910)
Digital abnormalities	<i>Count N.D. Guriev</i> (1821)	Hermitage (St. Petersburg)	Jean-Auguste-Dominique Ingres (1780–1867)
Absent digit			
Polydactyly	<i>Ernest Reinhold</i> (1908)	Musée de Beaux-Arts (Brussels)	Oskar Kokoshka (1886–1980)
Syndactyly	<i>Self Portrait with Seven Fingers</i> (1912)	Stedelijk Museum (Amsterdam)	Marc Chagall (1887–1985)
Down syndrome	<i>Portrait of a Canon</i> (Identified as Nicolai Aegidius) (1517)	Royal Museum of Arts (Antwerp)	Quentin Massys (c. 1465–1530)
	<i>Ecce Homo</i> (c. 1510)	Domkapitel (Aachen)	Master of Aachen Altar (active 1495–1525)
	<i>A Child with Nondisjunction</i> (nd)	Private Collection	Josef Warkany, Frontispiece of his textbook (1902–1992)
Duchenne muscular dystrophy (?)	<i>Sick Boy</i> (1915)	Formerly Städtische Kunstsammlung Chemnitz	Karl Schmidt-Rottluff (1884–1976)
Dwarfism – Disproportionate short stature	<i>The Dwarf Morgante</i> (c. 1552)	Deposita della Soprintendenza (Florence)	Angelo di Cosimo Bronzino (1503–1572)
Achondroplasia	<i>Arrigo peloso, Pietro matto and Amon nano</i> (c. 1598–1600)	Museo Nazionale di Capodimonte (Naples)	Agostino Carracci (1557–1602)
	<i>Don Baltasar Carlos with a Dwarf</i> (1631–32)	Isabella Stewart Gardner Museum (Boston)	Velázquez (1599–1660)
	<i>Calabazas</i> (1637–1639)	Prado (Madrid)	Velázquez (1599–1660)
	<i>Francesco Ravai called Bajocco</i> (1773)	Kunstmuseum (Copenhagen)	Jens Juel (1745–1802)
	<i>Grimaces et misères</i> (1888)	Musée du Petit Palais (Paris)	Fernand Pelez (1843–1913)
Pseudo-achondroplasia	<i>The Dwarf Doña Mercedes</i> (1899)	Musée d'Orsay (Paris)	Ignacio Zuloaga (1870–1945)
	<i>Sebastián de Morra</i> (c. 1644)	Prado (Madrid)	Velázquez (1599–1660)
	<i>El Primo</i> (1644)	Prado (Madrid)	Velázquez (1599–1660)
	<i>The Heidelberg Court Dwarf Perkeo</i> (c. 1730)	Kurpfälzisches Museum (Heidelberg)	Johann Georg Dathan (1703–c. 1764)
Spondylo-epiphyseal dysplasia (?)	<i>Aragonese Dwarf</i> (1825)	Fogg Art Museum (Cambridge, Massachusetts)	Vicente Lopez-y-Portana (1772–1850)
	<i>Isabella Clara Eugenia with her Dwarf</i> (c. 1580)	Prado (Madrid)	Teodoro Felipe de Liaño (c. 1515–1590)
Dwarfism – Proportionate short stature (hormone deficiency)	<i>Cardinal Granvella's Dwarf and Dog</i> (c. 1560)	Louvre (Paris)	Anthony van Dasher (called Antonio Moro) (1519–1575)
	<i>Court Dwarf Estevanillo</i> (1563–68)	Staatliche Kunstsammlungen (Kassel)	Anthony van Dasher (called Antonio Moro) (1519–1575)
	<i>Philip IV and the Dwarf Soplillo</i> (c. 1618)	Prado (Madrid)	Rodrigo de Villandrando (d. 1622)

(continued)

Dwarfism – Miscellaneous Mucopolysaccharidosis (?)	<i>Aletheia Talbot and Her Train</i> (c. 1630) <i>Queen Henrietta and her Dwarf</i> <i>Sir Jeffrey Hudson</i> (c. 1633) <i>King Charles II of Spain Attending an Auto-da-fé Accompanied by his Three Dwarfs</i> (1680) <i>Portrait of the Court Dwarfess Mlle, Marichen</i> (1684–1715)	Alte Pinakothek (Munich) National Gallery (Washington) Prado (Madrid)	Peter Paul Rubens (1577–1640) Anthony Van Dyck (1599–1641) Francisco Rizi (1608–1685)
	<i>The Miniaturist</i> <i>Andreas von Behn</i> (1700)	Nationalhistoriske Museum pa Fredericksborg (Hillerød, Denmark) Gripsholm Palace, Swedish National Portrait Gallery (Stockholm)	Jaques d'Agar (1640–1715) David von Krafft (1655–1724)
Other/various	<i>The Salzburg Court Dwarf Franz von Meichelböck</i> (c. 1727) <i>Nicholas Ferry, called Bébé, With Dog</i> (c. 1760) <i>Portrait of the Dwarf Count J. Boruulaski, 1793–1837</i> (nd) <i>Abendgesellschaft (Evening Gathering)</i> (c. 1847) (Self-portrait)	Deutsches Historisches Museum (Berlin) Musée Historique Lorrain (Nancy) Museum Narodowe (Krakow, Poland) Staatliche Museen, Preussischer Kulturbesitz (Berlin)	Frans von Stampart (?) (1675–1750) Anonymous (mid-18th century) Unknown German painter Adolph von Menzel (1815–1905)
	<i>Christ Before Pilate</i> (c. 1420) <i>The Dispute of St. Catherine</i> (1525) <i>Charles Emmanuel I as a Child with his Court Dwarf</i> (before 1572) <i>Archduke Ferdinand with a Court Dwarf</i> (1604) (hypothyroidism?) <i>El Niño de Vallecas – Francisco Lezcano</i> (1637) (hypothyroidism?) <i>Dwarf with a Dog</i> (1643) <i>Jacoba Maria van Wassenaer or Bernardino Margriet van Raesfeld</i> (1660) <i>Gregorio the Dwarf</i> (1908) <i>Head of a Young Man</i> (Early 16 C)	Landesmuseum (Mainz) Boymans-van Beuningen Museum (Rotterdam) Galleria Sabauda (Turin) Kunsthistorisches Museum (Vienna) Prado (Madrid) Formerly Lederer Collection (Vienna) Mauritshuis (The Hague)	Master of the Oberstein Altar (active 1400–1420) Jan Provoost (c. 1465–1529) Giacomo Vighi, called d'Argentina (c. 1510–1573) Joseph Heintz the Elder (1564–1609) Velázquez (1599–1660) Jusepe de Ribera (1591–1652) Jan Steen (c. 1625–1679)
Epidermolysis bullosa (Syphilis?)	<i>Heritage</i> (1899) Various self portraits (see text) <i>The Bearded Woman of Peñaranda</i> (c. 1590's)	Hermitage (St. Petersburg) Fogg Art Museum (Cambridge, Massachusetts) Munch Museum (Oslo) Gemeentemuseum (Amhem) Prado (Madrid)	Ignacio Zuloaga (1870–1945) Hans Holbein The Younger (1497/8–1543)
	<i>Magdalena Ventura</i> (1631) <i>Woman with a Beard</i> (1957) <i>Emperor Charles V at Mühlberg</i> (1547)	Lerma Foundation (Toledo) Private Collection (UK) Prado (Madrid)	Edvard Munch (1863–1944) Dick Ket (1902–1940) Juan Sánchez Cotán (1561–1627) Jusepe de Ribera (1591–1652) L.S. Lowry (1887–1976) Titian and literally hundreds of others (c. 1487–1576)
Falloot's tetralogy with dextrocardia Female hirsutism			
Habsburg jaw			

(continued)

TABLE I. (continued)

Diagnosis	Painting		
	Title (date)	Location	Artist
Hemiplegia	<i>The Clubfooted Boy</i> (1642)	Louvre (Paris)	Jusepe de Ribera (1591–1652)
Hypertrichosis universalis	<i>Portrait of Peter Gonzales and his Children</i> (c. 1582)	Kunsthistorisches Museum (Vienna)	Bavarian (artist unknown)
Noonan's syndrome (?)	<i>Among Those Left</i> (1929)	Museum of Art, Carnegie Institute (Pittsburgh)	Ivan Le Lorraine Albright (1897–1983)
Osteogenesis Imperfecta	<i>Archille Empereire</i> (1820–1898), <i>Aixois Painter</i> (c. 1868)	Musée d'Orsay (Paris)	Paul Cezanne (1839–1906)
Pectus carinatum	<i>Agosta the Pigeon-Chested Man & Rasha the Black Dove</i> (1929)	Private Collection	Christian Schad (1894–1982)
Phocomelia	<i>Charles Emmanuel I of Savoy as a Child Accompanied by a Dwarf</i> (1573)	National Gallery (Turin)	Giacomo Vigghi called Argenta (?–1573)
Prader-Willi syndrome (?)	<i>Eugenia Martinez Vallejo, La Monstrua</i> (c. 1680)	Prado (Madrid)	Juan Carreño de Miranda (1614–1685)
Pyknodysostosis	Various self portraits <i>Toulouse-Lautrec at the Natanson's in Villeneuve-sur-Yonne</i> (1897)	Musée Toulouse-Lautrec (Albi, France)	Henri de Toulouse-Lautrec (1864–1901)
Strabismus	<i>Self Portrait</i> (c. 1491)	Erlangen-Nürnberg Universitätsbibliothek	Edouard Vuillard (1868–1940)
	<i>Portrait of the Artist</i> (1493)	Louvre (Paris)	Albrecht Dürer (1471–1528)
	<i>Laughing Peasant Woman</i> (1505)	British Museum (London)	Albrecht Dürer (1471–1528)
	<i>Dürer's Mother</i> (1514)	Kupferstichkabinett (Berlin)	Albrecht Dürer (1471–1528)
	<i>Count Tommaso Inghirami</i> (1513–1514)	Museum of Fine Arts (Boston)	Raphael (1483–1520)
	<i>Caspar Sturm</i> (1520)	Musée Condé (Chantilly)	Albrecht Dürer (1471–1528)
	<i>Fedra Inghirami</i> (1516)	Pitti (Florence)	Raphael (1483–1520)
	<i>Margrave Albrecht von Brandenburg, Duke of Prussia</i> (1528)	Herzog Anton Ulrich Museum (Braunschweig)	Lucas Cranach (1472–1553)
	<i>Portrait of Calabazas</i> (c. 1632)	Cleveland Museum of Art	Velázquez (1599–1660)
	<i>Archibald Campbell</i> (c. 1660)	National Portrait Gallery (Edinburgh)	David Scougall (active 1654–1677)
	<i>Little Girl with a Squint</i> (c. 1961)	Gracefield Art Centre (Dumfries, Scotland)	Joan Eardley (1921–1963)
Synophrys	Various self-portraits	Museum of Modern Art (New York) & private collections	Frida Kahlo (1907–1954)
White forelock (acquired?)	<i>James McNeill Whistler</i> (1885)	Metropolitan Museum (New York)	William Merritt Chase (1849–1916)
	<i>James McNeill Whistler</i> (c. 1895)	Kupferstichkabinett (Berlin)	Thomas R. Way (1861–1913)

*In most cases the information has been personally checked by the author.



Figs. 4 and 5. Portraits of patients with mental retardation and microcephaly. (Plate lxxx [p. 219] and Plate xci [p. 247] reproduced from A. Morison's *The Physiognomy of Mental Diseases* (1840) with kind permission of the Royal College of Physicians of Edinburgh.)

the specific diagnosis is not always entirely clear [Kunze and Nippert, 1986; Enderle et al., 1994]. In recent times we are likely to be more confident of the diagnosis when this is particularly stated by the artist. Sir Roy Calne is Professor of Surgery in Cambridge and



Fig. 6. *Boy After a Liver Transplant* (1989) Sir Roy Calne. (Reproduced by kind permission of the artist.)

a noted artist. His 1989 portrait of a boy recovering from a liver transplant who is stated to have Wilson's disease is a case in point (Fig. 6).

CONCLUSIONS

Portraits of the artist him/herself, or of others, may wittingly or unwittingly document a congenital abnormality or genetic disorder in the subject. Such works of art provide a fascinating study for those with interests in the field as well as widening our enjoyment of paintings in general.

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